

REMARKS

Claims 1-4 remain in this application. Claims 5-14 have been previously canceled.

Claims 1-4 stand rejected under 35 U.S.C. §102(e) as being anticipated by Ding et al. (U.S. Pub. No. 2002/0041472). Applicants respectfully traverse this rejection.

The present invention is directed to a method for measuring a resonance frequency of an information recording/reproducing device, which includes applying sine-wave oscillations at different frequencies one by one to a mechanism unit of the information recording/reproducing device, and counting the number of times information reproduced upon application of each of the sine-wave oscillations differs from the information indicating an aimed location. In this manner, it is possible to measure a resonance frequency during a track following operation without performing a seek operation. In other words, the present invention does not require a seek operation as a source of external disturbance. Instead, a frequency of external disturbance (i.e. the frequency of sine-wave oscillations) is directly specified, thereby allowing a response to be measured only at frequencies for which measurement is required. Further, the method in accordance with the present invention eliminates the need for a complicated computation such as performing a digital fourier transform to obtain a resonance frequency.

The Ding et al. reference relates to a method of handling multiple resonance frequencies in a disk drive, and discloses identifying problematic frequencies representing the center frequency of a band pass filters by analyzing PES zero-crossing data (see paragraph 83). Specifically, Ding teaches counting the zero-crossings of the PES during a

seek settling process in order to obtain a rough estimate of the dominant frequency that appears during seek settling (see paragraph 86).

In contrast to the teachings of Ding et al., the present invention obtains the resonance frequency by applying sine-wave oscillations at different frequencies and counts the number of times the information reproduced from application of the sine-wave oscillations differs from the information indicating an aimed location. As such, the resonance frequency is measured without the necessity of performing a seek operation, as is taught in Ding et al. Thus, the present method of applying sine-wave oscillations is not disclosed or suggested by a method for analyzing PES zero-crossing data disclosed in Ding et al. For this reason, independent claim 1 and its dependent claims 2-4 are allowable over Ding et al.

For all of the above reasons, Applicants request reconsideration and allowance of the claimed invention. The Examiner should contact Applicants' undersigned attorney if a telephone conference would expedite prosecution.

Respectfully submitted,

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November 18, 2003

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